

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. and 2. (canceled).

3. (currently amended): A system for monitoring packets transmitted on a channel connecting an application server and an end-user of said application server to each other, said system comprising:

(a) a certification server which certifies an end-user; and

(b) a packet monitor device which, upon receipt of a request from said certification server, monitors packets transmitted on said channel,

wherein said certification server includes:

(a1) a first memory which stores a user management table including ID numbers of end-users, passwords by which the end-users are identified, a monitoring parameter designating a packet to be monitored, and a threshold parameter designating a method of monitoring said packet;

(a2) a second device which transmits a request to said packet monitor device to start or finish monitoring said packet at a timing when said end-user logs-in or logs-out his/her terminal,

wherein said packet monitor device includes:

(b1) a fourth memory which stores a first time at which a packet transmitted from one of said application server and said end-user arrives, when said packet monitor device receives a request from said second device to monitor said packet;

(b2) an analyzer which monitors a second time at which packets meeting said monitoring parameter arrive, and determines whether any rule has been satisfied during an interval between said first time and said second time; and

(b3) an annunciator which makes annunciation to said end-user when a certain rule is satisfied during said interval; and

wherein said packet monitor device is configured to monitor at least one of a data sequence of said packets, a service identifier of said packets and a checksum of said packets,

and

wherein said threshold parameter is a predetermined time or a predetermined number,

and

wherein said rule is that whether a total time of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined time, or said rule is that whether a total number of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined number.

4. and 5. (canceled).

6. (previously presented): The system as set forth in claim 3, wherein said packet monitor device include:

(b1) a second memory which stores said monitoring parameter transmitted from said second device;

(b2) a third memory which stores said threshold parameter transmitted from said second device; and

(b3) a third device which determines the contents of said second and third memories when said second device transmits a request to said packet monitor device to start or finish monitoring said packet.

7. (previously presented): The system as set forth in claim 6, wherein said analyzer analyzes whether there is any rule in said interval and whether said interval exceeds said threshold parameter, and said annunciator makes annunciation to said end-user when said analyzer judges that there is a certain rule in said interval and that said interval exceeds said threshold parameter.

8. (currently amended): A method of monitoring packets transmitted on a channel connecting an application server and an end-user of said application server to each other, said method comprising:

(a) acquiring a monitoring parameter indicative of a packet to be monitored, when said end-user logs-in his/her terminal;

(b) monitoring a time at which packets coincident with said monitoring parameter arrive, and determining whether there is any rule in an interval between a time when the monitoring parameter is acquired and said arrival time;

(c) making annunciation to said end-user when there is a certain rule in said interval; and

(d) monitoring at least one of a data sequence of said packet, a service identifier of said packet and a checksum of said packet;

wherein said monitoring parameter is included in a user management table which further includes an ID number of said end-user, a password by which said end-user is identified, and a threshold parameter designating a method of monitoring said packet, and

said step (a) includes the steps of:

(a1) retrieving said user management table, based on said ID number and said password both input by said end-user;

(a2) acquiring said monitoring parameter, if said monitoring parameter is stored in said user management table; and

(a3) acquiring said threshold parameter, if said threshold parameter is stored in said user management table; and

wherein said threshold parameter is a predetermined time or a predetermined number,
and

wherein said rule is that whether a total time of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined time, or said rule is that whether a total number of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined number.

9. (previously presented): The method as set forth in claim 8, further comprising the step of ceasing said step (b) when said end-user logs-out his/her terminal.

10. (canceled).

11. (previously presented): The method as set forth in claim 8, wherein said step (b) includes the step of analyzing whether there is a certain rule in said interval and whether said interval exceeds said threshold parameter, after acquiring said threshold parameter in said step (a2), and said step (c) includes the step of making annunciation to said end-user, if there is a certain rule in said interval and said interval exceeds said threshold parameter.

12. and 13. (canceled).

14. (currently amended): A recording medium readable by a computer, storing a program therein for causing a computer to act as a system for monitoring packets transmitted on a channel connecting an application server and an end-user of said application server to each other,

said system comprising:

(a) a certification server which certifies the end-user; and

(b) a packet monitor device which, on receipt of a request from said certification server, monitors packets transmitted on said channel,

wherein said certification server includes:

(a1) a first memory which stores a user management table including ID numbers of end-users, passwords by which the end-users are identified, a monitoring parameter designating a packet to be monitored, and a threshold parameter designating a method of monitoring said packet; and

(a2) a second device which transmits a request to said packet monitor device to start or finish monitoring said packet at a timing when said end-user logs-in or logs-out his/her terminal,

wherein said packet monitor device includes:

(b1) a fourth memory which stores a first time at which a packet transmitted from one of said application server and said end-user arrives, when said packet monitor device receives a request from said second device to monitor said packet;

(b2) an analyzer which monitors a second time at which packets meeting said monitoring parameter arrive, and determines whether any rule has been satisfied during an interval between said first time and said second time;

(b3) an annunciator which makes annunciation to said end-user when a certain rule is satisfied during said interval; and

wherein said packet monitor device is configured to monitor at least one of a data sequence of said packets, a service identifier of said packets and a checksum of said packets, and

wherein said threshold parameter is a predetermined time or a predetermined number,
and

wherein said rule is that whether a total time of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined time, or said rule is that whether a total number of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined number.

15. and 16. (canceled).

17. (previously presented): The recording medium as set forth in claim 14, wherein said packet monitor device includes:

(b1) a second memory which stores said monitoring parameter transmitted from said second device;

(b2) a third memory which stores said threshold parameter transmitted from said second device; and

(b3) a third device which determines the contents of said memories when said second device transmits a request to said packet monitor device to start or finish monitoring said packet.

18. (previously presented): The recording medium as set forth in claim 17, wherein said analyzer analyzes whether there is any rule in said interval and whether said interval exceeds said threshold parameter, and said annunciator makes annunciation to said end-user when said analyzer judges that there is a certain rule in said interval and that said interval exceeds said threshold parameter.

19. (currently amended): A recording medium readable by a computer, storing a program therein for causing a computer to carry out a method of monitoring packets transmitted on a channel connecting an application server and an end-user of said application server to each other, said method comprising:

(a) acquiring a monitoring parameter indicative of a packet to be monitored, when said end-user logs-in his/her terminal;

(b) monitoring a time at which packets coincident with said monitoring parameter arrive, and determining whether there is any rule in an interval between a time when the monitoring parameter is acquired and said arrival time;

(c) making annunciation to said end-user when there is a certain rule in said interval; and

(d) monitoring at least one of a data sequence of said packet, a service identifier of said packet and a checksum of said packet;

wherein said monitoring parameter is included in a user management table which further includes an ID number of said end-user, a password by which said end-user is identified, and a threshold parameter designating a method of monitoring said packet, and

said step (a) includes the steps of:

(a1) retrieving said user management table, based on said ID number and said password both input by said end-user;

(a2) acquiring said monitoring parameter, if said monitoring parameter is stored in said user management table; and

(a3) acquiring said threshold parameter, if said threshold parameter is stored in said user management table-, and

wherein said threshold parameter is a predetermined time or a predetermined number,
and

wherein said rule is that whether a total time of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined time, or said rule is that whether a total number of continuously receiving packets meeting said monitoring parameter in said interval is over said predetermined number.

20. (previously presented): The recording medium as set forth in claim 19, wherein said method further includes the step of ceasing said step (b) when said end-user logs-out his/her terminal.

21. (canceled).

22. (previously presented): The recording medium as set forth in claim 19, wherein said step (b) includes the step of analyzing whether there is a certain rule in said interval and whether said interval exceeds said threshold parameter, after acquiring said threshold parameter in said step (a2), and said step (c) includes the step of making annunciation to said end-user, if there is a certain rule in said interval and said interval exceeds said threshold parameter.

23. (previously presented): The method as set forth in claim 8, wherein the end-user is not performing an administrative function of said application server.

24. (previously presented): The recording medium as set forth in claim 19, wherein the end-user is not performing an administrative function of said application server.

25. (previously presented): The system as set forth in claim 3, wherein the packet monitor device is located in the channel between the application server and the end-user.

26. (previously presented): The system as set forth in claim 3, wherein said packet monitor device is configured to compare information about said packets to said monitoring parameter.

27. (previously presented): The system as set forth in claim 26, further comprising a counter, wherein said counter is configured such that, if said rule is satisfied, then said counter is incremented.

28. (previously presented): The system as set forth in claim 27, further comprising a comparator, which compares said counter to said threshold parameter.

29. (previously presented): The system as set forth in claim 3, wherein said threshold parameter comprises a duration after which a packet coincides with the monitoring parameter or a service fee.

30. (previously presented): The system as set forth in claim 3, wherein said service identifier comprises data for identifying a service provided for a fee.